

REMARKS

In the present Amendment, the specification has been amended to correct typographical errors. Claim 1 has been amended to improve its grammar and claim 8 has been amended to correct a typographical error. No new matter has been added.

Entry of the Amendment “after final” is submitted to be proper, since Applicants are merely improving the grammar and form of the specification and claims and no questions of further search or consideration should be raised.

Upon entry of the Amendment, claims 1-6 and 8-13 will be pending.

In Paragraph Nos. 1-3 of the Action, claims 1 and 8 are objected to because of the following informalities:

In claim 1, the Examiner suggests replacing the phrase “which increases the solubility” with “which has increased solubility” or a phrase having a similar meaning.

In claim 1, correction of the term “1-adamantyl-1-alkylalkyl” is required.

In claim 8, correction of the term “perfluorobutanesulfonic” is required.

To overcome the first objection and improve the grammar of claim 1, Applicant has amended the expression “which increases the solubility” to “which increases its solubility. . . .” The expression in question is commonly used in the photoresist art, and persons of ordinary skill in the art can readily recognize and understand its meaning.

In response to the second objection, Applicant responds that the term “1-adamantyl-1-alkylalkyl” does not need correction. A 1-adamantyl-1-alkylalkyl group is proper organic chemistry nomenclature. Reconsideration and withdrawal of the objection are respectfully requested.

Amendment Under 37 C.F.R. § 1.116
U.S. Appln. No.: 10/694,171

In claim 8, the spelling of “perfluorobutanesulfonic” acid has been corrected.

Accordingly, it is believed that the objections to the claims have been overcome.

In Paragraph No. 5 of the Action, claims 1-6 and 8-13 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Harada et al (U.S. Patent No. 6,511,787).

Applicant submits that this rejection should be withdrawn because Harada et al does not disclose or render obvious the positive resist composition of the present invention.

While Harada et al enumerates in the specification that a 3-alkoxyalcohol may be used as a solvent for the resist composition, Harada et al neither discloses nor suggests the fact that the “spreading property of the developing solution”, which is an advantageous effect of the present invention, is exhibited by the combination of a resin having a specified structure with a 3-alkoxyalcohol. See the description of “Component (B)”, that is, the organic solvent, at column 16, line 36 to column 17, line 43 of Harada et al.

For example, Harada et al does not mention 3-alkoxyalcohols as preferable solvents, and does not include any description or illustration of a 3-alkoxyalcohol solvent in the examples. Thus, Harada does not recognize at all the special effect of the improvement of “spreading property of a developing solution” attained by the specific combination of the present invention.

Moreover, the effect of Harada et al only includes high transparency of the resin and the fact that an alkali solubilization reaction proceeds by appropriate light irradiation. Harada et al’s Abstract states that “An acrylic resin containing hexafluoroisopropanol units has high transmittance to VUV [vacuum ultraviolet] radiation.” It is stated that a resist composition using the resin as a base polymer has high transparency, substrate adhesion, alkali developability and acid-elimination capability and is suited for lithographic micro-processing. See Harada et al’s

Abstract and Summary of the Invention. These effects have nothing to do with the aforementioned effect of the present invention at all, and the specification of Harada et al does not include any sentence or description suggesting, foreshadowing or alluding to the aforementioned effect of the present invention.

Furthermore, Comparative Example 2 as shown in the specification of the present application illustrates a composition similar to the one disclosed in the example of Harada et al (containing polymer-C and polymer-H) relied upon by the Examiner, and uses a resin having an adamantane-containing protective group and a solvent free of 3-alkoxyalcohol. See Comparative Example 2 in Table 2 at page 92 of the specification, and the description of the solvents SL-6 and SL-8 employed therein at page 94 of the specification. The results in Table 2 show that the samples embodying the present invention provided unexpectedly superior results in terms of change in sensitivity and affinity for developer (which relates to the spreading property of the developing solution) in comparison to Comparative Example 2.

Specifically, in Comparative Example 2, the effects of the present invention were not attained, clearly showing the significance of the combination of the specified resin with the specified solvent defined by the present invention in order to achieve the effect thereof.

Hence, Harada et al does not specifically teach anything about the combination of the specified resin with the specified solvent, indicating that the technical concepts are widely different as between the invention of the present application and Harada et al. Accordingly, it thus would not have been obvious, even for those skilled in the art, to modify Harada et al to arrive at the present invention.

Amendment Under 37 C.F.R. § 1.116
U.S. Appln. No.: 10/694,171

In view of the above, reconsideration and withdrawal of the § 103(a) rejection of claims 1-6 and 8-13 based on Harada et al are respectfully requested.

In Paragraph No. 6 of the Action, the Examiner states that Applicant's arguments regarding the §103 rejection of claim 7 based on Tanigawa et al (WO 00/58252) in view of Fujimori et al have been considered fully, and they "are not persuasive." [sic]. It is believed the Examiner meant to say that Applicant's arguments "are persuasive," because the next sentence of the Action states: "Consequently, the rejection has been withdrawn."

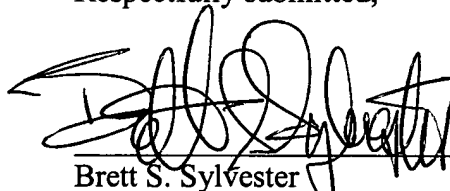
The subject matter of claim 7 is now included in claim 1, claim 7 having been canceled in the Amendment filed on December 14, 2005. While it is believed, as noted above, that the rejection of claim 7 based on Tanigawa et al in view of Fujimori et al has been overcome, Applicant, for the record, repeats and incorporates by reference herein the reasons for claim 7's patentability over the art, as explained at pages 6-9 of the Amendment filed December 14, 2005.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.116
U.S. Appln. No.: 10/694,171

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brett S. Sylvester", written over a horizontal line.

Brett S. Sylvester
Registration No. 32,765

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: June 1, 2006